

a whorl of 3, others single; timber durable). *Eromanga*: Dillon Bay, sea level, rain-forest, common, no. 268, May 17, 1928 (tree up to 15 m. high with straight barrel, used by natives for house supports).—Also in Queensland.—Vernacular name “Nemarmis.”

MENISPERMACEAE

Stephania Forsteri A. Gray, Bot. Wilkes U. S. Explor. Exped. I. 36 (1854).

Eromanga: Dillon Bay, sea level, rain-forest, common, no. 337, May 29, 1928 (vine growing up to the tops of trees; fruit red when ripe; stems used as ropes for house making).—Also Efate; New Caledonia, Lord Howe, Tonga, Samoa and Society Islands, New Guinea, North Australia, Admiralty Islands to Java and the Philippine Islands.—Vernacular name “No-ses-sore-vol.”

Hypserpa neo-caledonica Diels in Engler, Pflanzenr. IV-94, 209 (Menispermac.) (1910).

Eromanga: Dillon Bay, alt. 300 m., rain-forest, common, no. 284, May 23, 1928 (vine climbing on the small trees; flowers cream-colored).—Also Loyalty Islands, New Caledonia.—Vernacular name “Nosimpatuavu.”

VIOLACEAE

Hybanthus ilicifolius Schinz & Guillaumin in Sarasin & Roux, Nova Caled. I. 183 (1921).

Aneityum: Anelgauhat Bay, sea level, seashore, common, no. 921, March 17, 1929 (small tree up to 9.5 m. high; flowers white).—Also Loyalty Islands, New Caledonia.

BIXACEAE

Bixa Orellana Linnaeus, Sp. Pl. 512 (1753).

Tanna: Lenakel, alt. 200 m., rain-forest, common, no. 108, March 6, 1928 (shrub about 5 m. high; fruit brown; seed bright pink).

American plant introduced in all the tropical countries.

PITTOSPORACEAE

Pittosporum aneityense Guillaumin, sp. nov.

Arbor parva, 5 m. alta, ramis modice validis teretibus rugose lenticellatis, primum appresse rufo-pilosis deinde glabris pallideque cinereis, foliis longiuscule (1.5–2 cm.) petiolatis lanceolatis (9–11 cm. x 2.5–3 cm.), apice obtusis rotundatisve, basi longe cuneatim attenuatis, supra atroviridibus infra appresse argenteo-pilosis, rigidis integerrimis, floribus roseis terminalibus dense fasciculatis, pedicello circa 2 mm. longo dense roseo-lanuginoso, bracteis lineari-

lanceolatis pedicello longioribus extra dense roseo-lanuginosis intus apice lanuginosis basin versus glabris, calyce campanulato ad medium in lobos rotundatos diviso extra dense roseo-lanuginoso, petalis usque ad tertiam superiorem partem cohaerentibus obtusis glabris, antheris sessilibus lanceolatis, ovario 2-mero elongato dense roseo-lanuginoso, in stigma cylindricum glabrum attenuato; fructibus brunneo-flavis 3-nis fasciculatis, pedicello 0.5 cm. longo satis rigido appresse rufo-piloso, obovoideis (circa 2.5 cm. x 1.8 cm.) 2-meris 6-angulis, angulis ad commissurae utrumque latus 2-nis, rugose suberosis appresse rufo-pilosis.

A n e i t y u m: Anelgauhat Bay, alt. 30 m., rain-forest, common, no. 723, Feb. 11, 1929 (small tree up to 15 m. high; leaves dark green above, silvery underneath; fruit brownish yellow when ripe, 2.5 cm. long); west coast, lower ranges, alt. up to 500 m., common, no. 962 (coll. *J. P. Wilson*), Sept. 1929 (low tree up to 40 cm. in diam.; leaves medium; flowers small, pink; fruit pear-shaped, 2.5 cm. x 2 cm.).—Vernacular name "Nalas."

Pittosporum Campbellii F. v. Mueller, Contr. Phyt. New Hebrides, 5 (1874).

A n e i t y u m: Anelgauhat Bay, sea level, rain-forest, common, no. 696, Feb. 4, 1929 (a small tree 15 m. high; leaves dark green with prominent yellow-pink midrib; fruit orange when ripe, of strong nauseating smell). **T a n n a**: Lenakel, alt. 100 m., rain-forest, not common, no. 32, Feb. 21, 1928 (tree up to 10 m. high; flowers cream-colored; fruit brown, seeds red; has a repulsive odor when bark is broken).—Collected before on Tanna.

Pittosporum rhytidocarpum A. Gray, Bot. Wilkes U. S. Explor. Exped. i. 228, t. 18 (1854).

E r o m a n g a: Dillon Bay, alt. 300 m., rain-forest, common, no. 378, June 7, 1928 (small tree up to 10 m. high; fruit yellow inside, seeds black and numerous; seeds used by natives for a purple dye).—Also in the Fiji Islands.—Vernacular name "Nel-a-verti."

GUTTIFERAE

Garcinia Pancheri Pierre, Fl. For. Cochinch. II. 25, t. 89, fig. D (1887).

B a n k s G r o u p: Vanua Lava, alt. 100 m., rain-forest, common, no. 414, July 5, 1928 (tree up to 15 m. high; leaves very dark green; natives say one variety has red fruit and one has white); sea level, rain-forest, common, no. 415, July 5, 1928 (small tree up to 7 m. high; fruit red, when ripe). **E r o m a n g a**: Dillon Bay, alt. 400 m., rain-forest, common, no. 342, June 1, 1928 (large tree up

to 15 m. high; ripe fruit eaten by natives); alt. 300 m., rain-forest, common, no. 389, June 8, 1928 (large tree up to 15 m. high; fruit red when ripe, eaten by the natives). *Aneityum*: Anelgauhat Bay, sea level, rain-forest, common, no. 831, Feb. 28, 1929 (tree found growing in moist places as in depressions or on banks of creeks; fruit immature).—Also in New Caledonia.—Vernacular name “Ney-yah-heven” (under no. 389).

Garcinia vitiensis Seeman, Fl. Vit. 10 (1865).

Aneityum: Anelgauhat Bay, alt. 300 m., rain-forest, common, no. 840, March 2, 1929 (large tree up to 12 m. high; fruit immature on specimens; wood durable).—Also in the Fiji Islands.

Calophyllum Inophyllum Linnaeus, Sp. Pl. 513 (1753).

Aneityum: Anelgauhat Bay, sea level, seashore, common, no. 783, Feb. 19, 1929 (large tree up to 18 m. high; fruit yellow when ripe, only half grown on specimens; wood used for canoe-making). *Tanna*: Port Resolution, sea level, rain-forest, no. 69, Feb. 27, 1929 (tree about 15 m. high, about 40 cm. in diam.; flower white with yellow stamens). *Banks Group*: Vanua Lava, sea level, seashore, common, no. 431, July 10, 1928 (large tree up to 8 m. high; flower white, sweetly scented; stamens yellow).—Also Efate; throughout the Pacific Islands except the New Zealand region, the Tonga, Wallis, Tubuai, Paumotu and Gambier Islands; Australia (Queensland, N. Australia), Malaysia.

Calophyllum Inophyllum L.?

Aneityum: Anelgauhat Bay, alt. up to 300 m., rain-forest, common, no. 953 (coll. J. P. Wilson), Sept. 1929 (up to 18 m. high and 1 m. in diam.; leaves green, midrib yellow; flowers small, white; fruit round, brown, 2.5 cm. in diam., not edible; commercial timber much like mahogany but softer).—Vernacular name “Inpece” (Tamanu).

Calophyllum neo-ebudicum Guillaumin, sp. nov.

Arbor magna, usque ad 30 m. alta, trunco 1 m. diam., cortice nitido, ligno levi, gemmis exceptis glaberrima, ramis teretibus cortice brunneo vestitis, foliis elliptico-lanceolatis (6–7 cm. x 2.5–3 cm.) obtuse acuminatis basi acutis chartaceis utrinque nitidis atro-viridibus in sicco marginibus costaque brunneis, petiolo gracili circa 1.5 cm. longo, costa subtus prominente supra basin versus caniculata, nervis creberrimis prominulis. Racemi apicem versus axillares, numerosi, 5–7.5 cm. longi, 9–11-flori, rachi 2–3 cm. longo, pedicellis 1.5–2 cm. longis, floribus 1 cm. latis, sepalis 4 concavis 5 mm. longis margine ciliolatis, petalis 4 ovatis apice rotundatis

aequilongis albis, staminibus numerosis, antheris flavis, ovario ovato apice dilatato, stigmatate peltato 2-lobo. Fructus globosus usque ad 2 cm. diam., pruinosis, apice stylo cuspidatus.

A n e i t y u m: Anelgauhat Bay, alt. 25 m., rain-forest, common, no. 705, Feb. 4, 1929 (large tree up to 20 m. high; leaves dark green; petals white; numerous yellow anthers; used for canoe-making). **E r o m a n g a**: Dillon Bay, alt. 300 m., rain-forest, common, no. 288, May 23, 1928 (one of the largest rain-forest trees in Eromanga, up to 25 m. high and 1 m. in diam.; used for canoes and fish spears because of its lightness); alt. 300 m., rain-forest, common, no. 399, June 8, 1928 (very large tree up to 30 m. high, bark light colored, wood used for spears on account of its lightness and strength).—Vernacular name “Pork-cull” or “Porkgud.”

Its aspect recalls *C. pulcherrimum* Wall. distributed from Cambodia to Banca, but it differs in the longer petioles, the different color of the leaves when dry, in the longer inflorescence and particularly in the presence of petals.

MALVACEAE

Hibiscus tiliaceus Linnaeus, Sp. Pl. 694 (1753).

Hibiscus abutiloides Willdenow, Enum. Hort. Berol. 736 (1809).

T a n n a: Lenakel, sea level, black sandy soil on beach, common, no. 2, Feb. 20, 1928 (a beautiful spreading tree about 12 m. high, usually with two stems; leaves dark green; flowers creamy yellow, open in middle of day for only a short time). **B a n k s G r o u p**: Vanua Lava, sea level, rain-forest along seashore, common, no. 443, July 9, 1928 (a tree up to 12 m. high, common throughout the New Hebrides, used by settlers to form fences by the planting of straight branches which take root readily).—Also Efate and throughout the Pacific Islands except the New Zealand region, Wallis, Tubuai, Paumotu, Union, Phoenix and Gilbert Islands; in Queensland, N. Australia, New Guinea and Malaysia.—Vernacular name “Cottonwood.”

Hibiscus tiliaceus L. f. *variegata* Guillaumin, form. nov.

Arbor 8 m. alta, foliis variegatis obovatis integris, basi non cordatis, 9-nervi.

T a n n a: Lenakel, alt. 150 m., native gardens, rain-forest, common, no. 85, March 3, 1928 (an ornamental tree about 8 m. high; leaves variegated; flowers yellow).

Hibiscus diversifolius Jacquin, Coll. II. 307 (1788); Ic. Pl. Rar. III. t. 551 (1786–1793).

A n e i t y u m: Anelgauhat Bay, sea level, swamp, common, no. 816, Feb. 26, 1929 (up to 2 m. high, growing in swamps; petals

cream-colored, dark velvety red inside at base; flowers open only in middle of day for a few hours).—Also New Caledonia, Loyalty and Fiji Islands, Norfolk Island, Queensland, New South Wales.

Thespesia populnea (L.) Solander apud Correa in Ann. Mus. Hist. Nat. Paris, IX. 290 (1807).

A n e i t y u m: Anelgauhat Bay, sea level, seashore, common, no. 798, Feb. 21, 1929 (tall rambling tree up to 12 m. high; petals cream-colored with pink inside at the base; fruit 3 cm. long, 2.5 cm. in diam.). **E r o m a n g a**: Dillon Bay, sea level, rain-forest, common, no. 373, June 7, 1928 (tree up to 15 m. high, growing close to the sea; flowers creamy-yellow); along seashore, sea level, rain-forest, common, no. 407, June 8, 1928 (small tree up to 10 m. high; flowers cream-colored). **B a n k s G r o u p**: Vanua Lava, seashore, sea level, rain-forest, common, no. 484, July 16, 1928 (common tree along all the shores of the New Hebrides; flowers yellow).—Also Efate and throughout the Pacific Islands except the Tonga, Wallis, Tubuai, Paumotu, Union, Phoenix and Gilbert Islands; in Queensland, North Australia, New Guinea, Malaysia.—Vernacular names “Novo-mil” (under no. 407) and “No-vor-mil” (under no. 373); “Bois de rose d’Océanie” of the French colonists.

STERCULIACEAE

Sterculia banksiana Guillaumin, sp. nov.

Arbor 20 m. alta, ramis primum stellato-pilosis deinde glabris, foliis integris ovatis (usque ad 20 cm. x 11 cm.) apice obtusis basi cordatis supra glabris infra sparse stellato-pilosis, nervis 8–9-jugis tenuibus, petiolo gracili usque ad 5 cm. longo sparse stellato-piloso; inflorescentiae apicem versus axillares, paniculatae, usque ad 5 cm. longae, stellato-pilosae, graciles, floribus albis, pedicello capillari usque ad 8 mm. longo stellato-piloso, calyce ovato usque ad medium 4-laciniato, laciniis tenuibus lineari-lanceolatis 3 mm. longis acutis recurvis 3-nerviis, intus extraque dense hispido-pilosis; flores masculi androphoro brevissimo, staminibus circa 20 sessilibus, flores bisexuales carpellis 4–5 ovarium ovoideum 4–5-costatum dense hispido-pilosum in stylum glabrum attenuatum formantibus, stigmatibus 4–5 pendulis crassis roseis. Fructus brunnei, circa 8 mm. lati, 6 mm. longi.

B a n k s G r o u p: Vanua Lava, sea level, rain-forest, common, no. 494, July 18, 1928 (large tree up to 20 m. high; flowers white; fruit brown).

It seems to approach particularly *S. Forsteri* Seem. (*S. Balanghas* Forst., non L.)

***Sterculia tannaensis* Guillaumin, sp. nov.**

Arbor 20 m. alta, ramis primum stellato-pilosis, foliis verticillatim 7-10-nis palmatim 9-foliolatis, foliolis ovato-lanceolatis (usque ad 30 cm. x 9 cm.), apice basique acutis, primum supra sparse infra densius stellato-pilosis deinde supra glabris infra sparse stellato-pilosis rigids 12-15-jugis, petiolo robusto ultra 5 cm. longo apicem versus hispido-piloso; inflorescentiae apicem versus axillares, anguste paniculatae, usque ad 20 cm. longae, stellato-pilosae, sat robustae, floribus intus roseis sessilibus, calyce campanulato extra dense stellato-piloso intus longe denseque hirsuto, pilis incurvis dentibus 5 crassis lanceolatis; flores bisexuales androphoro tubo calycino 2-plo brevioribus glabro, staminibus circa 20 sessilibus, carpellis 2-3, ovarium 2-3-lobum dense hispido-pilosum in stylum hispido-pilosum in ovario decumbens contractum formantibus, stigmatibus 2-3-lobis. Fructus rufi, 3.5 cm. lati, folliculis 2-3 1.5 cm. longis.

Tanna: Lenakel, sea level, rich rain-forest soil, common, no. 14, Feb. 21, 1928 (tall tree about 20 m. high; leaves arranged in whorls of seven to ten; flowers pink when open).

***Heritiera littoralis* Dryander in Aiton, Hort. Kew. III. 546 (1789).**

Anenityum: Anelgauhat Bay, sea level, rain-forest, common, no. 776, Feb. 19, 1929 (large tree 12 m. high, with spreading habit; leaves dark green, light yellow midrib, silvery underneath; buds silvery, petals pink inside; fruit 8 cm. long, 5 cm. diam.)—Also New Caledonia, Australia (Queensland), Fiji, Tonga, Caroline and Mariana Islands, New Guinea, Malaysia.

***Melochia odorata* Linnaeus f., Suppl. 302 (1781).**

Anenityum: Anelgauhat Bay, sea level, rain-forest, common, no. 713, Feb. 9, 1929 (small tree, 10 m. high; outer petals light pink, inner corolla dark pink)—Already found on Tanna and Efate; also New Caledonia, Loyalty, Fiji, Tonga, Samoa and Mariana Islands and Malaysia.

***Commersonia echinata* Forster, Char. Gen. p. 43, t. 22 (1776).**

Anenityum: sea shore and adjoining hills, alt. 7-70 m., no. 958 (coll. *J. P. Wilson*), Sept. 1929 (small tree, 8.15 cm. diam.; leaves silvery on back; flowers small, white; fruit covered with soft spines); Anelgauhat Bay, sea level, rain-forest, common, no. 715, Feb. 9, 1929. **Efate:** Undine Bay, alt. 200 m., rain-forest, common, no. 238, April 28, 1929 (tree up to 15 m. high; flowers white).—Also New Caledonia, Australia (Queensland, New South Wales), Fiji, Samoa, Society, Marquesas, Caroline and Bismarck Islands, New Guinea, Malaysia.—Vernacular name: "Nitchma" (under no. 958).

TILIACEAE

Grewia Malococca Linnaeus f., Suppl. 409 (1781).

A n e i t y u m : Anelgauhat Bay, sea level, sea shore, common, no. 920, March 17, 1929 (small tree, 12 m. high; flowers white).
T a n n a : Lenakel, alt. 100 m., rain-forest soil, common, no. 70, March 1, 1928 (small tree, 7 m. high). **E f a t e** : Fila Island, Vila, alt. sea level, rain-forest, common, no. 178, April 12, 1928 (small tree growing on sea coast; petals white).—Also New Caledonia, Loyalty, Fiji, Tonga, Samoa and Society Islands.

Grewia inmac Guillaumin, sp. nov.

Arbor alta, trunco ultra 60 cm. diam., ramis levibus in sicco castaneis glabris, foliis ovatis (usque ad 17 cm. x 8 cm.) basi rotundatis apice subito acute acuminatis supra nitidis margine apicem versus denticulatis in utraque pagina pilis lepidotis leviter scabris, nervis 6-7-jugis prominentibus, venis in nervis perpendicularibus prominulis, petiolo 1.5-2 cm. longo cito glaberrimo, stipulis lanceolatis 8 mm. longis glabris cito caducis. Inflorescentiae apicem versus axillares paniculatim cymosae, foliis breviores glaberrimae, floribus albis 1-3-nis, pedicello ad 7 mm. longo lepidoto, sepalis 5 ellipticis circa 1 cm. longis acutis extra dense lepidotis intus sparsius stellato-pilosis, petalis 5 spathulatis sepalis aequilongis apice obtuse rotundatis extra lepidotis intus basi pilis hirsutis nectarium cingentibus exceptis glabris, staminibus numerosis, filamentis glabris, antheris arcuatis peltate insertis et rima transversali dehiscentibus, ovario dense lepidoto 1-loculari, placentis 2 tantum oppositis septato, ovulis valde numerosis, stylo brevissimo, stigmatibus 4 reflexis marginibus crassis. Fructus 1 cm. diam.

A n e i t y u m : Anelgauhat Bay, alt. up to 275 m., rain-forest, common, no. 967 (coll. *J. P. Wilson*), Sept. 1929 (tall tree up to 0.60 m. in diam.; leaves large; flowers medium, white; fruit 2 cm. long, 0.5 cm. in diam.).—Vernacular name "Inmac."

This species is remarkable on account of its ovary which is not two-loculed, but has two opposite placentas with numerous ovules.

Triumfetta sp. nov.?

T a n n a : Lenakel, 200 m., rain-forest, common, no. 180, March 7, 1928 (weed growing in native gardens).

ELAEOCARPACEAE

Elaeocarpus hortensis Guillaumin, sp. nov.

Arbor parva, 15 m. alta, trunco 60 cm. diam., ramis apice dense foliatis glabris, foliis atro-viridibus obovatis (usque ad 13 cm. x 5 cm.) apice rotundatis basi cuneatis glabris integris, nervis 6-8-jugis, immersis, petiolo circa 3 cm. longo. Inflorescentiae

racemosae ad axillas foliorum delapsorum 1-2-nae, 3-5 cm. longae, pedicellis gracilibus 1.5 cm. longis glabris, sepalis anguste lanceolatis 14 mm. longis extra glabris intus brevissime albo-velutinis, petalis ellipticis (13 mm. x 6 mm.) apice irregulariter 4-fidis extra glabris margine ad basin pilosis, intus in costa supra basin dilatata elevataque pilosis, staminibus petalis 2-plo brevioribus minutissime puberulis, antheris linearibus apice apiculatis, filamentis sub-aequilongis, disco 4-squamo carnosio minute puberulo, ovario globoso 2-loculari glabro, loculis 6-ovulatis, stylo subulato glabro. Fructus ovoideus (3 cm. x 1.8 cm.), 1-locularis.

Tanna: Lenakel, alt. 200 m., rain-forest, not common, in native gardens, no. 127, March 7, 1928 (a tree about 15 m. high and about 60 cm. diam.; leaves dark green).

It rather resembles *E. ovigerus* Brongn. & Gris of New Caledonia, but the leaves do not show the special reticulation and there are only 6, not 9-10 ovules in each locule. As the species has only three series of ovules in each locule and not 4, it must be placed in the section *Fissipetalum*.

***Elaeocarpus Kajewskii* Guillaumin, sp. nov.**

Arbor parva, 5 m. alta, ramulis dense foliatis primum hispidorufopilosis mox glabris, foliis ovatis (usque ad 8.5 cm. x 3-5 cm.) oppositis vel sub-oppositis apice acutis apiculatisque basi rotundatis vel leviter cordatis supra glaberrimis, infra primum in costa nervisque sparse hispidis deinde glabrescentibus rigidis margine irregulariter undulatis subserratisve, nervis 9-10-jugis, petiolo usque ad 4 mm. longo sparse hispido; flores erecti, sublutei, apice ramulorum corymbosi, hispido-tomentosi, circa 1 cm. longi, pedicellis gracilibus, sepalis 4-5 lanceolatis, 12 mm. longis acutis in utraque pagina sparse, marginibus dense brevissime pilosis, petalis 4-5 truncato-cuneatis 14 mm. longis apice obtuse 8-11-lobis extra puberulis intus ad basin rufo-lanuginosis, marginibus ad tertiam superiorem partem dense lanuginosis, staminibus 20-25, petalis 2-plo brevioribus, antheris linearibus breviter apice longe hispido-pilosis, filamentis brevioribus, disco 8-10-squamo carnosio breviter rufo-piloso, ovario ovoideo 4-5-loculari dense rufoque hispido-piloso, loculis 6-ovulatis, stylo subulato dimidio inferiore rufo-hispido-piloso. Fructus maturitate ruber.

Anenityum: Anelgauhat Bay, sea level, common, growing usually on banks of water courses, no. 710, Feb. 9, 1928 (small tree up to 15 m. high; flowers cream-colored; fruit red when ripe).

It belongs probably to the section *Papuanthus*.

***Elaeocarpus* spec. affinis *E. persicaefolius* Brongn. & Gris.**

Anenityum: Anelgauhat Bay, alt. 300 m., rain-forest, com-

mon, no. 917, March 17, 1929 (small tree up to 9 m. high; fruit 2 cm. long, 2.5 cm. in diam.; wood used for comb-making). **Tanna**: Lenakel, alt. 200 m., rain-forest, common, no. 93, March 5, 1928 (tree about 20 m. high, with straight trunk). **Erroma**: Dillon Bay, alt. 400 m., rain-forest, common, no. 328, May 29, 1928 (large tree up to 25 m. high; fruit blue, globular, flattened at each end, 1.5 cm. in diam.).—Vernacular name "Nay-yos."

MALPIGHIACEAE

Ryssopteris timorensis Blume ex Jussieu in Delessert, Icon. Sel. III. 21, t. 35 (1837).

Anenityum: Anelgauhat Bay, sea level, rain-forest, common, no. 803, Feb. 21, 1929 (vine growing on rain-forest trees; flowers bright yellow). **Efate**: Undine Bay, sea level, rain-forest, common, no. 206, April 25, 1928 (vine spreading over small trees; flowers yellow). **Banks Group**: Vanua Lava, sea level, rain-forest, seashore, common, no. 432, July 10, 1928 (vine growing up to the tops of trees and small bushes; flowers yellow to orange; common throughout the Group).—Already found before on Efate; also in the Bismarck Islands, New Guinea, Malaysia.

Niendenzu considers the plants of New Caledonia as belonging to two distinct species: *R. austro-caledonica* Ndzu. and *R. discolor* Gandoger but to me it seems that they are only forms of the same species, for the plants of New Guinea have the leaves glabrous and the stamens pubescent, those of the New Hebrides have both the leaves and the stamens glabrous, and those of New Caledonia have the leaves pubescent and the stamens glabrous.

RUTACEAE

Evodia hortensis Forst. var. **typica** Lauterbach in Bot. Jahrb. LV. 231 (1918).

Anenityum: Anelgauhat Bay, sea level, rain-forest, common, no. 800, Feb. 21, 1929 (small tree up to 6 m. high; leaves highly scented; flowers white; twigs used by natives to wear in armlets on account of their sweet scent). **Tanna**: Lenakel, alt. 150 m., rich rain-forest soil, common, no. 51, Feb. 24, 1928 (small tree about 7 m. high; flowers white). **Banks Group**: Vanua Lava, sea level, rain-forest, common, no. 424, July 6, 1928 (small tree about 6 m. high; leaves highly scented with a pleasing odor and crushed by natives to anoint their bodies for dancing; flowers white).

Evodia hortensis var. **sinuata** Lauterbach in Bot. Jahrb. LV. 232 (1918).

Anenityum: Anelgauhat Bay, sea level, rain-forest, common, no. 794, Feb. 20, 1929 (small tree up to 6 m. high; flower white,

sweetly scented; leaves fragrantly scented and rubbed by the natives on their bodies).

The type was already known from Tanna, Efate, Espiritu Santo, also from New Guinea, Bismarck, Samoa, Solomon, Wallis, Tongo and Fiji Islands.

Evodia Kajewskii Guillaumin, spec. nov.

Arbor mediocris, in silvis 10–15 alta, in terra rubra 5 m. tantum alta, ramis atro-rubris ad petiolos dilatatis, foliis atro-viridibus 3-foliatis, foliolis lanceolatis vel ovato-lanceolatis (usque ad 26 cm. x 6 cm.) asymmetricis, lateralibus vulgo falcatis, basi cuneatis apice longe caudato-acuminatis rigide membranaceis, nervis 10–17-jugis tenuibus, venis reticulatis, petiolulis 2–3 mm. longis, petiolis 2.5–5 cm. longis. Inflorescentiae axillares, paniculatae, petiolis paulo longiores, sordide puberulae, floribus albis, pedicello vix 1 mm. longo sordide puberulo, sepalis 4 extra puberulis obtuse triangularibus, petalis 4 glaberrimis 2 mm. longis ovatis apice inflexis, staminibus 4, filamentis glabris post anthesin antheris 2-plo longioribus, ovario dense piloso, carpellis 4, stylo staminum filamentis aequilongo apicem versus clavato. Fructus maturi lutei, subglabri, dense glandulosi, minimi, 1–2-cocci, seminibus atro-rubris.

E r o m a n g a: Dillon Bay, alt. 300 m., poor red soil, bracken country, common, no. 300, May 24, 1928 (tree up to 15 m. high, in rain-forest, but in poor red soil only 5 m. high; flowers white; leaves heated and applied to abscesses or sores). **A n e i t y u m:** Anelgauhat Bay, sea level, rain-forest, common, no. 716, Feb. 9, 1929 (medium-sized tree up to 15 m. high; leaves dark green; fruit light yellow when ripe).—Vernacular name “Neet-Nung” (under no. 300).

This species is to be placed near *E. cuspidata* K. Schum., but the inflorescence is much shorter.

Evodia Schullei Warb. var. **simplicifolia** Guillaumin, var. nov.

Foliis simplicibus linearibus usque ad 16 cm. x 3.5 cm. margine undulatis, petiolo 1.5–2.5 cm. longo.

T a n n a: Lenakel, alt. 200 m., rain-forest, common, no. 48, Feb. 24, 1928 (shrub 6 m. high; leaves have a pleasant kind of sarsaparilla scent). **E r o m a n g a:** Dillon Bay, alt. 300 m., rain-forest, common, no. 387, June 8, 1928 (small tree up to 10 m. high; leaves have an agreeable odor, slightly citrous, hard to describe).—Vernacular name “U layseye.”

The type is found in the Bismarck Islands.

Evodia triphylla De Candolle, Prod. 1. 724 (1824).

T a n n a: Lenakel, alt. 150 m., rich rain-forest soil, common, no.

52, Feb. 24, 1928 (specimen from small tree about 7 m. high; flowers white); alt. 250 m., rain-forest, common, no. 115, March 6, 1928 (specimens from small tree about 7 m. high).

Also in the Solomon Islands, New Guinea?, Malaysia.

Evodia sp. aff. *E. latifolia* DC.

A n e i t y u m: Anelgauhat Bay, alt. 300 m., rain-forest, common, no. 764, Feb. 14, 1929 (medium-sized tree up to 12 m. high; fruit cream-colored when ripe, 5 mm. long, 3 mm. in diam.).

Bauerella australiana Borzi in R. Boll. Ort. Bot. Palermo, 1. 153 (1897).

A n e i t y u m: Anelgauhat Bay, alt. 300 m., rain-forest, common, no. 761, Feb. 14, 1929 (large tree up to 21 m. high; fruit brown when ripe, 2 cm. long, 1.5 cm. in diam.).—Also New Caledonia and Australia (Queensland, New South Wales).

Halfordia kendack Guillaumin in Lecomte, Not. Syst. II. 98, (1911).

A n e i t y u m: Anelgauhat Bay, sea level, poor sandy red soil, common, no. 698, Feb. 4, 1929 (in poor soil; this is a shrub or in scrub small tree up to 5 m. high; flowers cream-colored; lower ranges, alt. up 200 m., no. 971 (coll. *J. P. Wilson*) Sept. 1929 (small tree, 23 cm. diam.; flowers small, white; fruit dark brown (1.3 cm. x 1 cm.); used for making combs, wood hard, white).—Vernacular name "Nugasop" (under no. 971).—Also in New Caledonia.

Micromelum pubescens Blume, Bijdr. Fl. Ned. Ind. 138 (1825).

A n e i t y u m: Anelgauhat Bay, alt. 30 m., rain-forest, common, no. 739, Feb. 13, 1929 (small tree up to 12 m. high; flowers white). *E r o m a n g a*: Dillon Bay, sea level, rain-forest, common, no. 261, May 15, 1928 (small tree up to 8 m. high; leaves dark green; flowers white; fruit red when ripe). *B a n k s G r o u p*: Vanua Lava, sea level, rain-forest, common, no. 418, July 6, 1928 (shrub about 3 m. high; fruit red when ripe; common throughout New Hebrides).—Already recorded from Efate; also Queensland, North Australia, Fiji, Tonga, Samoa and Bismarck Islands, New Guinea, Malaysia, etc.—Vernacular name "Nawghantivau" (under no. 261).

Murraya crenulata Oliver, in Jour. Linn. Soc. v. Suppl. II. 29 (1861).

A n e i t y u m: Anelgauhat Bay, sea level, rain-forest, common, no. 789, Feb. 20, 1929 (large tree up to 18 m. high; flowers have a scent like Eucalyptus; fruit cream when ripe, dotted with oil glands, 0.5 cm. long, 0.7 cm. in diam.). *E r o m a n g a*: Dillon Bay, sea level, rain-forest, common, no. 374, June 8, 1928 (large tree up to

20 m. high). T a n n a: Lenakel, alt. 200 m., rich rain-forest soil, common, no. 46, Feb. 24, 1928 (tree 12 m. high, 20 cm. in diam.; fruit cream-colored when ripe, eaten by the natives).—Already found on Tanna; also Queensland, New Caledonia, Loyalty Islands, Malaysia.—Vernacular name “Nepe-yessey” (under no. 374).

Murraya exotica Linnaeus apud Murray, Syst. Veg. ed. 13, 331 (1774).—De Candolle, Prodr. i. 537 (1824).

Murraea exotica Linnaeus, Mant. 563 (1771).

T a n n a: Lenakel, sea level, heavy rain-forest soil, common, no. 4, Feb. 20, 1928 (shrub about 2 m. high; leaves dark green; flower creamy white).

In the whole Archipelago; also in New Caledonia, Queensland, North Australia, New Guinea, Malaysia.

BURSERACEAE

Canarium nungi Guillaumin, sp. nov.—Fig. 2A.

Arbor 20 m. alta, trunco recto, 60 cm. diam., foliis usque ad 50 cm. longis?, foliolis 9–13 ovatis (6–19 cm. x 3.5–9 cm.) apice acuminatis basi rotundato-truncatis coriaceis, nervis 8–12-jugis, petioulis 1.5–2.5 cm. longis, petiolo 5–6 cm. longo?, stipulis persistentibus maximis usque ad 3 cm. x 2 cm., margine profunde erosis leviter falcatis in utraque pagina minute pilosis. Fructus 20–30, ovati (5 cm. x 3.5 cm.), pedunculo dense sordide rufo-piloso, pedicello 3–4 cm. longo valde robusto ut pedunculus piloso, calyce fructifero late (2 cm.) cupulato intus extraque dense velutina, pericarpio primum purpureo deinde nigro, putamine rotundate 8-costato, loculis fertilibus 2.

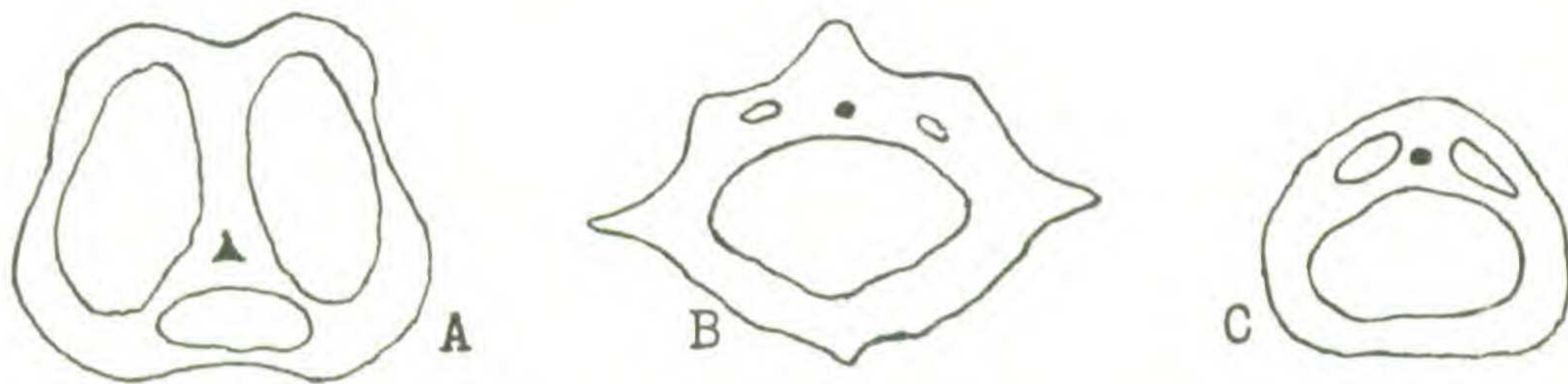


FIG. 2. Cross-sections of fruits of *Canarium*: A. *CANARIUM NUNGI* Guillaumin.—B. *CANARIUM* sp. nov.—C. *CANARIUM* sp. (R. C. Colomb). Nat. size.

T a n n a: Lenakel, alt. 100 m., rain-forest, common, no. 122, March 7, 1928 (tree about 20 m. high, straight barrel, about 60 cm. in diam.; fruit purple. outside skin black when ripe, in clusters of 20 and 30, 5 cm. long, 3.5 cm. in diam., kernel eaten by natives). E r o m a n g a: Dillon Bay, sea level, rain-forest, common, no. 243, May 14, 1928 (tree with straight trunk up to 20 m. high, fruit